**ADVOCATES**
FOR HIGHWAY
AND AUTO SAFETY

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July 15, 2004

Docket No. NHTSA-2004-17224
U.S. DOT Dockets, Room PL-401
U.S. Department of Transportation
400 Seventh Street, SW
Washington, DC 20590-001

**Evaluation of Federal Motor Vehicle Safety Standard 214 Side Impact Protection: Crush Resistance Requirements for Light Trucks – Technical Report, Notice with Request for Comments, 69 FR 12897 *et seq.*, March 18, 2004**

Advocates for Highway and Auto Safety (Advocates) submits the following comments in response to the notice of the National Highway Traffic Safety Administration (NHTSA) asking for public review of an agency technical report entitled, *Evaluation of FMVSS 214 – Side Impact Protection for Light Trucks: Crush Resistance Requirements for Side Doors*.[1]

The technical report uses data from calendar years 1989 through 2001 of the Fatal Analysis Reporting System (FARS) to determine the effectiveness of manufactured-supplied door beams in light trucks, vans, and sport utility vehicles (LTVs) by comparing changes in the number of fatalities in side impacts to those in frontal impacts. The technical report evaluates the contribution of the quasi-static cylinder test required in Standard 214 which comprises the gradual application against a passenger vehicle door of a steel cylinder 12 inches in diameter, with and without seats removed. There are different force applications for each of these vehicle conditions.

The use of this test has resulted in the installation of door beams in many passenger vehicles. The fundamental idea behind the door beams is to reduce intrusion of the passenger compartment that results in serious injuries and deaths to occupants especially in the outboard seating positions and, most particularly, to the occupant in a near-side lateral impact.

[1] DOT HS 809 719, February 2004.

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Advocates believes that this study shows the value of side door beams in single-vehicle lateral collisions with narrow objects. It is evident from the findings that there is little value in side door beams when there are impacts by other vehicles involving force distribution over a much wider area than the concentrated impact of a narrow, vertical roadside object.

Advocates agrees with the methodology used by the agency in this study. We also agree that the primary finding of the study is credible, *viz.*, that if all light trucks were equipped with side door beams, an estimated 124 lives would be saved annually in single vehicle nearside impacts with narrow cross-section, nonfrangible hazardous objects such as trees, poles, and nonbreakaway luminaires. This finding also shows how the agency's pending rulemaking on improving the side impact response of all light passenger vehicles by upgrading the stringency of the compliance test requirements in Federal Motor Vehicle Safety Standard No. 214 has emphasized the right aspects of improving occupant survival by concentrating on impacts with rigid objects in single-vehicle collisions that often involve highly localized occupant compartment intrusion. The indication that side door beams alone are partially effective in saving lives and reducing injury severity due to their installation in many light passenger vehicles demonstrates that this structural addition to the sides of vehicles complements the agency's proposed upgrade to Standard No. 214. Advocates would strongly support required installation of side door beams in all LTVs.

Respectfully submitted,
**ORIGINAL SIGNED**
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